ENVIRONMENTAL NEWS

Newsletter of the N.H. Department of Environmental Services March/April 2005

Governor's Message

Plans for the future

New Hampshire's natural beauty – its lakes, rivers and Seacoast, open spaces, forests, mountains – are part of why we all love and live in New Hampshire. Our clean air and clean water are essential to the health of our citizens. Our environment also is one of our state's most important economic assets, attracting visitors, new businesses, and new workers to our state.

As our state's population continues to grow, we face new challenges in protecting our environment. We must ensure that the environment we pass on to our children is better than the one passed on to us.

As a state, we have a long and proud tradition of working together to protect our environment. As Governor, I look forward to working with all of our citizens and the Department of Environmental Services to continue that tradition.

Governor Lynch was given a warm welcome when he visited DES the morning after his inauguration in January.

We are already taking steps to ensure that environmental protection is once again at the forefront of state activities. Commissioner Nolin and I recently released $500,000 in grants to help local communities protect their water supplies. This is a critical step toward helping communities protect the health of their citizens and their natural resources, but it must be part of an overall effort.

As Governor, I look forward to working with you to:

- Develop a long-term strategy for protecting our lakes.

Governor's Message, *continued on page 2*

Troy Mill cleanup nearing the end. See more on page 3.

Commissioner's Column

Spread the message: Earth Day Every Day

April 22 marks the 35th anniversary of Earth Day. This event is celebrated by thousands of people here in New Hampshire and millions of people worldwide. At the Department of Environmental Services the spirit of Earth Day is embraced every day. We are fortunate to have the opportunity to work on issues, projects and policy on a daily basis that have a direct impact on the health and welfare of our environment.

Although these environmental issues cover a broad spectrum, I thought I would share several that are of a high priority for the agency and on which, over the next year, we hope to make some significant progress. These include eliminating the additive MtBE from our gasoline supply, coordinating a statewide water resources management plan, preventing a potential crisis in our septage disposal capacity and fully implementing a state Mercury Reduction Strategy.

First, to reduce the amount of MtBE contamination in

Earth Day, *continued on page 2*

Governor's Message

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As our population and number of visitors grow, we must make sure we have a plan for managing development, reducing the threat of invasive species, and ensuring public access to our lakes.

- Protect our clean air and clean water. I will work with the Northeast Governors and the Eastern Canadian Premiers to develop regional approaches for reducing air pollution, and to advocate nationally for a strong Clean Air Act and a reduction in emissions from Midwestern power plants.
- Develop a Green State Initiative. State government should be a leader in protecting our environment, and I look forward to working with you to ensure that we are reducing waste and making the best use of our resources.

Thank you for your dedication to protecting our environment and the health of our citizens. I look forward to working with you to restore New Hampshire's bipartisan tradition of responsible environmental stewardship.

John Lynch, *Governor*

Commissioner's Column

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the state, the legislature directed DES to "opt-out" of the federal reformulated gasoline program and replace lost emissions benefits with rules being adopted in other Northeast states on stationary and area sources such as fuel containers, consumer products, and paints/coatings. DES is currently in the process of writing these rules, and anticipates final adoption of all of the rules by the fall. The State also will ban MtBE in 2007, contingent upon EPA approval of our opt-out request. While waiting for this approval from EPA, DES continues to provide ongoing technical support to the Attorney General's Office in its actions against major gasoline manufacturers to recover damages caused by MtBE contamination.

Second, water resource quantity, quality, protection and use are interrelated in complex ways that are also impacted by federal and state management and regulatory systems. Integrated planning, data collection, and data analysis are needed to understand and strike the balance for future water needs for a variety of uses, including drinking water supply, waste assimilation, power generation and cooling, recreation and support of balanced ecological systems. DES, in conjunction with the Water Resources Study Committee and other stakeholders, has proposed a statewide water resources management plan to identify these issues at the watershed level and provide an integrated, strategic direction for the protection and management of New Hampshire's water resources. Our Congressional delegation has helped to secure $100,000 for the study, but further resources will be needed to complete the work.

Third, as mentioned in my previous Commissioner's Column, septage disposal poses a potential crisis statewide. DES will continue its efforts to find an environmentally sound and sustainable solution to this issue.

Fourth, DES is committed to working toward the virtual elimination of man-made mercury releases. New Hampshire has adopted many elements of the state Mercury Reduction Strategy and the Regional Mercury Action Plan adopted by the New England Governors and Eastern Canadian Premiers. State law bans the use of some mercury-added devices such as thermometers and novelties, and requires manufacturers of mercury-added products to notify the state of their mercury use. DES is working with the legislature in hopes of phasing out the use of additional mercury-added products for which there are readily available non-mercury alternatives. Furthermore, DES proposes a ban on the sale of all mercury-added products of 1 gram or more by January 1, 2007 and products with 100 milligram to 1 gram by January 1, 2009, with certain exceptions such as pharmaceuticals.

Only together can we build upon the successes of the past to meet the environmental challenges of today and of the future.

These few examples illustrate the serious and complex nature of protecting our environment. Only together can we build upon the successes of the past to meet the environmental challenges of today and of the future. Earth Day, however, provides the opportunity for everyone to join in living "Earth Day Every Day." It is my hope that we don't look upon it simply as a slogan, but as a conscious lifestyle choice.

Michael P. Nolin, *Commissioner*

ENVIRONMENTAL NEWS

NHDES

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Troy Mill site cleanup enters final phases

Drum removal activities at the Troy Mills Superfund site were completed in December. Almost 7,800 drums of chemical wastes were removed along with 21,000 tons of contaminated soil. Cleanup equipment was decontaminated and staging facilities have been removed from the landfill site. A final cover of two feet of clean soil and revegetation will be placed this spring. Soil, groundwater and surface water samples were taken to assess the effectiveness of the waste removal actions and results will be available late this summer. A public meeting will be held this spring to present an overview of the waste removal activities and outline the scope and schedule of the remaining cleanup activities at the site. ■

New response section created

A better coordinated response to emergencies was initiated with the recent integration of all of the Waste Management Division incident response activities. The Special Investigation Section and the Oil Spill Initial Response Subsection have been integrated into the new "Spill Response and Complaint Investigation Section," headed by supervisor Rick Berry. The reorganization will improve the effectiveness and efficiency of both programs, and will reduce costs. The new section will also perform emergency response actions for hazardous air pollutant releases. The section's responsibilities include: response to petroleum and hazardous waste spills, hazardous air pollutant releases, and terrorism incidents; and investigations into petroleum, solid waste and hazardous waste complaints. For more information, please contact Rick Berry at (603) 271-3440 or rberry@des.state.nh.us. ■

Mike Galuzska and Leah Desmarais "overpack" old drums of chemical wastes at an incident response in this file photo.

New administrative roles for new and veteran staff

Four new administrators have been recently announced at DES, filling valuable leadership roles at the agency. They are: Sarah Pillsbury, Paul Heirtzler, Mary Ann Tilton and Ryan Lamey.

Sarah Pillsbury is the new administrator of the Water Supply Engineering Bureau. She has been with DES for 19 years; two and a half years with Subsurface, two and a half years as a project manager for waste sites, and the last 14 years creating and managing the Drinking Water Source Protection Program. Sarah is also currently vice-president of the national Ground Water Protection Council.

Paul Heirtzler has been named administrator of Waste Management Programs and oversees the solid waste, hazardous waste compliance, operator certification, pollution prevention, recycling and Green Yard programs. Paul has worked 22 years off and on for DES and its predecessor: eight years as a state employee and 14 years as a contract employee. In addition to master's degrees in civil and environmental engineering, Paul holds a master of business administration and a juris doctor degree.

Mary Ann Tilton, a veteran of 14 years at DES, was recently named administrator III in the Wetlands Bureau. She will be supervising permitting for the Bureau and assisting the Bureau Administrator in day-to-day management. Prior to her new position, Mary Ann was the senior enforcement officer for the Bureau.

Ryan Lamey, new to DES, is the new business administrator in the Administrative Services Unit, replacing Lorraine Schindler, who retired this past year. Ryan comes to us from the Insurance Department, where he was the business administrator, and brings to us several years of state experience.

Congratulations to all in their new roles at DES. ■

Did you know ...?

Did you know that the DES Wetlands website was listed as one of the top 100 wetlands websites? The editors at the World Environmental Organization in Washington have selected over 1,000 of the most useful environment-related websites and grouped them into ten categories, each containing 100 websites. To view the DES Wetlands' site, go to www.des.nh.gov/wetlands. To see World.Org's top 1,000 sites, go to www.world.org/weo/top1000.

Lake Sunapee and Lake Waukewan Selected to Pilot Watershed Approach

Based on a competitive process, DES selected Lake Sunapee, led by the Lake Sunapee Protective Association, and Lake Waukewan, led by the Town of Meredith, to pilot a new approach to local watershed management. The Watershed Approach offers a higher level of technical and financial assistance to support locally-driven watershed management goals. Areas of focus include a highly developed shoreland area and water quality impacts from full build-out development in the Lake Sunapee watershed, as well as protection of the drinking water supply and better characterization of tributary pollutant loads in the Lake Waukewan watershed.

Each watershed was allocated up to $50,000 in grants and access to technical consultant services over a two-year period.

In 1999, DES began developing the watershed approach to find a better way to prioritize watersheds in which to focus limited state resources. With input from lake associations, watershed organizations, state agencies, non-governmental conservation groups, and financial support from the U.S. Environmental Protection Agency, DES developed an answer: the Watershed Approach Pilot Program.

The DES Watershed Approach (see sidebar) begins with a geographic information system (GIS) analysis of 15 variables that pertain to water quality and quantity, biological resources, land resources, human influences, and recreational resources. These variables are analyzed on a 10-digit Hydrologic Unit Code (HUC) Watershed, to prioritize New Hampshire's watersheds into three management categories: need for protection, need for restoration, or threatened (see sidebar). With 81 watersheds at the 10-digit HUC scale, the DES GIS analysis has identified the top 20 watersheds within each management category.

Sunapee and Waukewan both fell within one of the top 20 "priority" watersheds within each management category.

Jacquie Colburn, DES Lakes Coordinator, will coordinate work in the Waukewan watershed, while Carolyn Russell and Andy Chapman will co-coordinate the Sunapee project.

DES met this month with both local watershed project leaders to begin developing action plans to protect or restore their watersheds. The range of activities could include education of municipal land use boards regarding stormwater runoff, collection and analysis of water quality data, and utilization of best management practices. DES anticipates that the state-level prioritization, combined with focused support of local initiatives, will provide significant results at the watershed level.

For more information about DES's Watershed Approach Pilot Program, please contact Eric Williams at (603) 271-2358 or ewilliams@des.state.nh.us.

What is the Watershed Approach?

The New Hampshire Watershed Approach is a coordinating framework for water quality management that focuses public and private sector efforts to address the highest priority issues within hydrologically-defined geographic areas.

Watershed Management Categories

In Need of Restoration: Watersheds in need of the manipulation of their physical, chemical, or biological characteristics with the goal of returning natural or historic functions of their waterbodies.

Threatened: Watersheds whose aquatic systems are unlikely to maintain chemical, physical, and biological integrity due to anthropogenic influences.

In Need of Protection: Action needed to prevent or restrict human activity in a watershed in order to prevent degradation of water quality.

N.H. Drinking Water Week Festival

May 4, 2005
9 a.m. to 3 p.m.
Massabesic Audubon Center
Auburn, NH

Sponsored by the NH Drinking Water Week Coalition

For information contact
Jessica Brock
(603) 271-4071 or
jbrock@des.state.nh.us

Winners of the 2004 Fourth Grade State Water Science Fair at the NH Drinking Water Week Festival.

Continuous improvement at air monitoring sites

DES recently relocated two air monitoring sites as part of its ongoing efforts to enhance and improve New Hampshire's air monitoring network.

Air monitoring station in Berlin.

A new air monitoring station began operation in January at the Lebanon Airport. This station, formerly located in Haverhill, monitors for ozone and fine particle pollution, and records meteorological data. Officials from the City of Lebanon and the Lebanon Airport assisted DES in a coordinated effort to establish this station.

A second new site recently came on-line in Nashua. Formerly situated in the parking lot at BAE Systems on Spit Brook Road, this new station located on Crown Street measures levels of fine particle pollution.

New Hampshire's statewide network of air monitoring stations has been in existence since the early 1960s, and over the years it has expanded to comply with federal requirements and to improve tracking of air quality. Presently, air monitoring occurs at 20 different sites. The stations measure "criteria pollutants" such as ozone, sulfur dioxide, nitrogen oxides, carbon monoxide, and particulate matter, as well as air toxics, mercury, and volatile organic compounds. Most monitoring stations also measure meteorological parameters such as wind speed, wind direction, and temperature.

DES and EPA use the information collected from the air monitoring stations to determine whether areas in New Hampshire are meeting health-based air quality standards set by EPA. These determinations are used to issue air quality alerts to protect public health, enact protective measures, determine the status of New Hampshire's air quality, predict air pollution episodes, and protect the natural environment.

For more information on New Hampshire's air monitoring network, contact Kendall Perkins at (603) 271-1384 or kperkins@des.state.nh.us. For a factsheet describing the entire network, see ARD-35 at www.des.nh.gov/factsheets/ard/ard-35.htm. ■

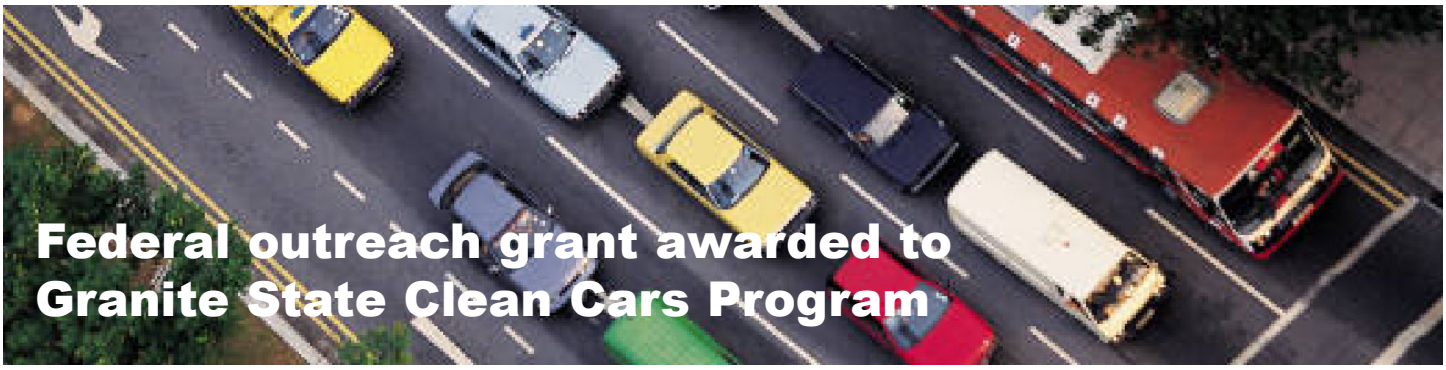
DES's EPA-approved Quality Assurance System

by Vince Perelli, Quality Assurance Manager, and Bob Minicucci, Assistant QA Manager

Environmental data is at the core of everything DES does to carry out its broad mission to help sustain a high quality of life by protecting and restoring the environment and public health in New Hampshire. Data is defined as any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology and models. DES uses environmental data to: identify and locate problem sources; allocate staff and financial resources; communicate environmental conditions and trends; direct public health advisories; support enforcement actions; and help steer educational and outreach activities. In short, environmental data permeates just about everything DES does.

It is because of this that the data DES uses for decision-making, whether it is collected directly by the agency or by other organizations and submitted to DES, must be scientifically defensible, and the quality of the data must be appropriate for its intended uses. Over the years, DES has steadily moved towards a more systematic approach to the management of data and overall quality assurance issues across the department. It has documented this approach through its Quality Assurance (QA) System, as described in the June 2001 EPA-approved DES Quality Management Plan, which is available on the DES website at www.des.nh.gov/QA/QMP.pdf.

The DES QA System follows a "Deming-style" management system of "Plan-Do-Check-Adapt," which, in its most basic form, ensures that: 1) planning is done before the work begins; 2) the work is carried out properly, following written procedures; 3) the work is checked to verify that it was indeed completed as planned; and 4) the assessment results are used to continuously improve operations. These four basic steps are the hallmarks of the DES QA System. The QA System is managed by an eight-person QA Team led by Vince Perelli, DES QA Manager and Chief of Planning and Policy, and Bob Minicucci, DES Assistant QA Manager and Innovative Technology Coordinator. For more information on the DES QA System, please go to www.des.nh.gov/QA. ■



Federal outreach grant awarded to Granite State Clean Cars Program

The *Granite State Clean Cars Program* is one of six programs nationwide to be awarded a grant under the 2004 Clean Cities/Fuel Economy Partnership Program. The goal of the grant program is to provide funds to a limited number of Clean Cities Coalitions or their members to undertake innovative projects to educate the public about the benefits of fuel economy. The U.S. Department of Energy's Clean Cities program seeks to protect energy security and improve air quality by reducing the use of foreign petroleum. The program supports actions to increase the use of alternative fuels, improve fuel economy, and reduce idling. A total of $100,000 was available for six to ten projects, with the goal of funding at least one project from each of the six Clean Cities Regions. New Hampshire was fortunate to be one of two grant recipients in the Boston region, along with Vermont.

New Hampshire's grant will be used to bolster outreach efforts of the *Granite State Clean Cars Program,* a partnership program initiated by DES in 2002 to help consumers identify and purchase cars that pollute less and are more fuel efficient. Program partners include DES, the N.H. Automobile Dealers Association (NHADA), the American Lung Association of New Hampshire, the Appalachian Mountain Club, and the N.H. Department of Transportation.

Through the *Granite State Clean Cars Program*, participating new car dealers label vehicles that meet low emission and high fuel economy standards with a specially designed sticker. To qualify for a sticker, vehicles must achieve a highway fuel economy rating of 30 miles per gallon or better, and be classified as a low emission vehicle (classification as SULEV, ULEV, LEV or better). To promote the program, consumer education materials on the environmental and economic impacts of vehicle choice have been developed and distributed. Participating dealers are provided with promotional plaques and showroom posters to market the program to new car shoppers. Although the program has seen some success, many consumers visiting dealerships still do not ask about environmental attributes of the vehicles they are buying and don't know to look for cars with the *Granite State Clean Cars* label.

The additional grant funds will enhance existing outreach efforts, focusing on strategies to inform and educate the public about the importance and impacts of their vehicle choices. Consumers will likely be more receptive to the benefits of driving "clean cars" because of their high fuel economy, lower emissions, and cost saving features—especially during periods of soaring fuel prices. Hopefully, as consumers become more interested in cleaner cars, dealer promotional efforts will increase and intensify.

So, if you are in the market for a new car, ask your dealer about cars that get better fuel economy and pollute less, and look for the unique *Granite State Clean Cars* label. For more information, visit www.cleancars.nh.gov or call Kathy Brockett at (603) 271-6294. ■

Did you know ...?

Did you know that every day, millions of cars idle needlessly in lines, dropping off or picking up passengers, making deliveries, or waiting in drive-thru lanes? It's normal to idle your car when stopped for traffic signals, but if you voluntarily idle your car for longer periods, you are wasting money, causing air pollution, affecting climate change, and possibly damaging engine parts.

Let's set the record straight about idling.

Today's fuel-injected engines don't need to be "warmed-up." Today's cars only need about 30 seconds of idling before driving.

Frequent restarting does not use more gas. Letting the vehicle idle for more than 10 seconds uses more gas than shutting it off and restarting.

Frequent restarting will not harm the vehicle.

To learn more about DES's "no idling" program, contact Kathy Brockett at (603) 271-6284 or kbrockett@des.state.nh.us. ■

Waste Management Division to hold technical topics seminars

The Waste Management Division is hosting a series of special interest technical seminars for staff and the public at DES on 29 Hazen Drive in Concord, NH. The presentations are structured like a town meeting so that everyone can ask questions and openly participate in the discussion. Experts in the field will be part of the presentations and provide information on the latest in technical innovations in waste site cleanup, waste management and waste reuse. The seminars are free of charge.

Please contact Amy Azeredo at aazeredo@des.state.nh.us or (603) 271-2905 if you plan to attend. Please feel free to bring your lunch.

March 18 — "Potpourri Waste Management Style"

"There are more things under heaven and earth, dear Horatio, than can be dreamed of in the minds of men." The same thing can be said about some of the innovative solutions to our waste problems that are currently underway at the Department. "Can pollution truly be prevented even if it is your father's Oldsmobile?" "Can you really make a biodiesel fuel from grease – or better yet – would you like a ride with those fries?" "Landfill gas odors: What are they, where did they come from and how are we going to get rid of them?"

April 15 — "Urban DNAPL Site Remediation – The Vapor Intrusion Problem"

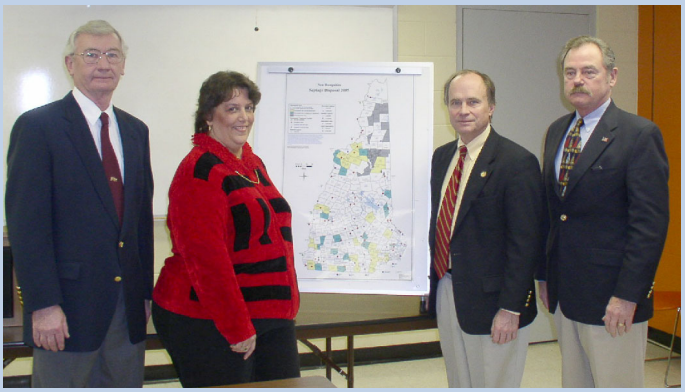
These chemical "sinkers" can cause more problems than most other contaminants in the groundwater. An emerging impact of DNAPL migration is the movement of contaminant vapors from the groundwater to building spaces. This seminar will discuss the latest in detection technology and mitigation efforts being employed at DNAPL remediation sites.

May 20 — "MtBE: Air and Water Cleanup Issues – The Mercury is Rising"

How far along are we in solving the MtBE problem in New Hampshire? Last year's seminar defined the problem. This year's topic discusses the waste and air program solutions to on of the most vexing of all the Granite State's environmental problems.

June 17 — "Guidance Document for the Evaluation of Sediment Quality – Remediation or Water Quality ?"

Come and hear how the new DES Sediment Quality Guidance Document addresses the needs of both the Waste Management and Water Divisions' sediment programs. ■



Congressman Bass and Commissioner Nolin (at right) are joined by Darlene Johnson and Bill Gosse of the N.H. Association of Septage Haulers at an event in January to announce a $600,000 federal grant to improve septage disposal capacity in the state.

Air Permit backlog addressed

by Todd Moore, Air Resource Permit Coordinator

The Air Resources Division state permitting program has made steady progress over the past few years to address a backlog of air permit applications from 2001. The backlog was the result of a high staff turnover and vacancy rate. Normally staffed with four engineers, the program was operating with just two permit engineers who were responsible for reviewing and processing over 160 open applications, almost 70 of which had been received more than a year ago. Since the program's goal is to process applications within 90 days, this was an unacceptable condition.

To address this situation, all efforts were concentrated on fully staffing the program, which was accomplished by September 2001. In addition, staff from other sections were temporarily enlisted to take on a few permit applications in addition to their normal duties. This reallocation of resources and increased staffing has produced significant results. By December 2004, the number of open applications had been reduced to only 68, of these, 23 are greater than one year old. The majority of those are in some form of active review, which will result in final actions in the near future. In addition to improving permit process time, the program has also improved in the quality of the permits. ARD permitting staff continue to work on completely eliminating the application backlog – a goal that looks achievable now. ■

The 2004 305(b)/303(d) Surface Water Quality Report and preparations for 2006

by Gregg Comstock and Ken Edwardson, DES Watershed Management Bureau

On April 1, 2004, the DES Watershed Management Bureau submitted the final 2004 Section 305(b) and 303(d) Surface Water Quality Report for New Hampshire to the U.S. Environmental Protection Agency as required by the federal Clean Water Act (CWA). Copies of the report may be downloaded from our website at www.des.state.nh.us/wmb/swqa.

The "305(b) Report" describes the quality of all surface waters and an analysis of the extent to which these waters provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water, i.e., designated uses.

The 303(d) list represents a subset of all impaired or threatened waters that 1) are impaired or threatened by a pollutant or pollutant(s); 2) are not expected to meet water quality standards even after application of best technology standards for point sources or best management practices for non-point sources; and 3) require development of a Total Maximum Daily Load (TMDL) study, i.e., a comprehensive water quality study that identifies all sources and pollutant reductions necessary to attain water quality standards.

The Comprehensive Assessment and Listing Methodology (CALM) is the document that explains in detail how we determine if a surface water is impaired or healthy. The current CALM, used for the 2004 assessment cycle, may be found at www.des.state.nh.us/wmb/swqa/2004/pdf/CALM.pdf. The Watershed Management Bureau is in the process of revising the CALM for the 2006 cycle. Anyone who has suggested revisions for the CALM may submit them to DES at WQdata@des.state.nh.us.

Squam Lake from West Rattlesnake in Holderness.

The next Section 305(b)/303(d) Surface Water Quality Report is scheduled to be completed by April 1, 2006. All data received by October 1, 2005, will be considered for use in the 2006 assessment. We encourage people to submit any data they may have. Iinstructions are available at www.des.state.nh.us/wmb/swqa/SubmitData.pdf. In February 2006, a draft 305(b)/303(d) will be made available for public review and comment on our surface water quality assessment website, www.des.state.nh.us/wmb/swqa. ■

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